Delaware Division of Air Quality

2011

Air Toxics Strategic Plan

Mid-year Status

(January through June 2011)

Summary Report

Delaware Division of Air Quality 2011 Air Toxics Strategic Plan

The Air Toxics Strategic Plan (ATSP) is a five-year plan of activities to be undertaken by Division of Air Quality (DAQ) and its partners to reduce the risk of adverse health effects caused by the inhalation of air toxics. The 2011 - 2015 ATSP, finalized on December 28, 2010, is organized within the following components.

- Implement and grow an ongoing program to address the risks from exposure to air toxics
- Build a greater understanding of ambient air toxics in the environment
- Identify the potential harm from exposure to air toxics
- Gather information related to air toxics sources
- Identify options for reducing air toxics in the environment
- Implement appropriate actions to reduce the harm from exposure to air toxics
- Evaluate the effectiveness of the actions taken to reduce harm from exposure to air toxics
- Enhance DAQ Air Toxics Resources

ACRONYMS

ATSP Air Toxics Strategic Plan

DAQ Division of Air Quality

DE&C Division of Energy & Climate

EPA U. S. Environmental Protection Agency

HAPs Hazardous Air Pollutants, as defined in Section 112(b) of the

1990 Amendments to the Clean Air Act

MACT Maximum Achievable Control Technology

MARAMA Mid-Atlantic Regional Air Management Association

NACAA National Association of Clean Air Agencies

USDOE U.S. Department of Energy

WILMAPCO Wilmington Area Planning Council

1. Implement appropriate actions to reduce the harm from exposure to air toxics

a. Key Accomplishments

- i. Awarded 85 grants and reserves totaling \$1.0 million, through the Delaware DE&C, for implementation of renewable and advanced energy technologies programs.
- ii. Completed five (5) full compliance evaluations (FCEs) at facilities subject to major air toxics source standards (i.e. MACT and residual risk standards).
- iii. Completed 51 compliance evaluations (~64% of current facilities) at perchloroethylene dry cleaning facilities.
- iv. Completed one (1) consultation at an auto body shop (<1% of current shops) to provide compliance assistance information following DAQ's adoption of Section 15 of Regulation 1138.
- v. Completed 65 inspections of regulated gasoline dispensing facilities (~18% of current facilities).
- vi. Tracked 192 vapor recovery tests of regulated gasoline dispensing facilities (~54% of current facilities).
- vii. Completed 62 perceptible leak tests on gasoline delivery vessels (~10% of current vessels).
- viii. Completed 262 site inspections at asbestos demolition sites.
- ix. Completed semi-monthly audits of the Division of Motor Vehicle's inspection and maintenance (I/M) program.
- x. Completed installation of the Smyrna Rest Stop Electrification project on March 21.
- xi. Completed five (5) diesel retrofit installations (diesel particulate filter and diesel organic catalyst) on City of Newark trucks.
- xii. Completed the stringency determinations that demonstrate Delaware permits or regulations are at least as stringent as or more stringent than federal area source air toxics standards. These determinations are a prerequisite for requesting delegation of Delaware permits or regulations in lieu of federal air toxics rules.
 - 1. Existing Title V permit for a hazardous waste combustor subject to Federal Subpart EEE completed in June.
 - 2. Proposed amendment to Section 8 of Regulation 1138 for halogenated solvent cleaning for facilities subject to the facility-wide requirements in Federal Subpart T completed in June.

1. Implement appropriate actions to reduce the harm from exposure to air toxics

a. Key Accomplishments - Cont.

- xiii. Submitted delegation request packages to EPA Region 3 for four (4) area source air toxics standards, whose newly adopted requirements are more public health protective than the similar national standards:
 - 1. Section 13 of Reg. 1138 on January 31, which is applicable to facilities that chemically strip coatings from miscellaneous parts or products using methylene chloride.
 - 2. Section 14 of Reg. 1138 on January 31, which is applicable to facilities that spray apply coatings containing heavy metal hazardous air pollutants (HAPs) to miscellaneous products or parts.
 - 3. Section 15 of Reg. 1138 on January31, which is applicable to facilities that spray apply coatings containing heavy metal hazardous air pollutants (HAPs) to motor vehicles or mobile equipment.
 - 4. Section 16 of Reg. 1138 on February 16, which is applicable to asphalt processing and asphalt roofing products manufacturing operations.
- xiv. Completed energy efficiency/conservation educational and outreach program at the Great Green Expo in March.
- xv. Finalized preparations for the July 5 kickoff of a new program to provide low-interest financing for residential, multi-family and non-residential renewable energy projects.
- xvi. Completed energy benchmarking of all large State-owned facilities on June 1 as part of implementation of Executive Order 18, which focuses on energy savings and green procurement in government agencies.

b. Significant Current Activities

- i. Began amendment of Section 8 of Regulation 1138 to add the residual risk requirements of Federal Subpart T applicable to facilities that perform halogenated solvent cleaning. (Est. completion 11/11)
- ii. Began to provide the public and regulated community with pertinent and timely information, including compliance assistance tools, for DAQ's amendment to Section 8 of Regulation 1138 to add the residual risk requirements of Federal Subpart T applicable to facilities that perform halogenated solvent cleaning. (Est. completion 11/11)
- iii. Began to monitor the effectiveness of the recently opened truck stop electrification facility at Delaware's I-95 Rest Stop. (Ongoing activity)
- iv. Began to provide energy education to state employees as part of implementation of Executive Order 18, which focuses on energy savings and green procurement in government agencies. (Est. completion -12/11)

1. Implement appropriate actions to reduce the harm from exposure to air toxics

b. Significant Current Activities - Cont.

- v. Began preparations for upcoming energy efficiency/conservation educational and outreach program at the Delaware State Fair from July 25 July 30. (Est. completion 7/11)
- vi. Began redesign of the open burning web site and update of information contain on the web site. (Est. completion -12/11)
- vii. Awarded the last of nearly \$10 million available for sub-grants under the "Energy Efficiency and Conservation Block Grant" program to reduce energy use and fossil fuel emissions. (Est. completion of municipal projects -9/12)
- viii. Continued to identify school bus and heavy-duty truck candidates for installation of diesel retrofits using 2010 Diesel Emissions Reduction Act (DERA) funding. (Est. completion 12/11)
- ix. Continued to incorporate electric arc furnace requirements in Federal Subpart YYYYY during the renewal of Evraz Claymont Steel's Title V permit. (Est. completion 9/11)
- x. Continued to promoted energy efficiency programs for residential and business sectors under the Delaware Sustainable Energy Utility. Provided ongoing support for . . .
 - 1. Residential lighting discounts. (Ongoing activity)
 - 2. Home performance with Energy Star. (Ongoing activity)
 - 3. Business *Plus* program. (Ongoing activity)
 - 4. Green for Green program. (Ongoing activity)
- xi. Continued to provide compliance assistance in meeting annual testing and permitting requirements to gasoline delivery vessel fleet owners. (Ongoing activity)

c. Pending

- i. The fourth (and final) heavy-duty diesel engine replacement for the Port of Wilmington project is on hold pending Port's scheduling of installation.
- ii. The priority amendment of two air toxics infrastructure standards have also been put on hold. These measures were taken as anticipated federal amendments to the General Provisions (Federal Subpart A) and for Case-By-Case Control Technology Determinations (Federal Subpart B) have been delayed, making the amendment of Section 3 and 4 of Regulation 1138 inappropriate at his time. The rescheduling of the delayed adoption will be addressed during the development of the 2012 ATSP this fall.

2. Implement an ongoing program to address the risks from exposure to air toxics

a. Key Accomplishments

- i. Issued the Division of Air Quality 2010 Air Toxics Strategic Plan Year-End Status Report on March 15. This report summarized the key accomplishments during 2010 and identified the significant ongoing activities continuing into 2011.
- ii. Solved potential regulatory deficiency on May 31 through development of a training tool that provides sequential regulatory activities, along with examples of work products. This tool provides guidance to new regulation writers and offers a consistent approach for experienced regulation writers.

b. Significant Current Activities

- i. Continued to actively participate in the National Association of Clean Air Agency's (NACAA) air toxics, monitoring, mobile source, and outreach committee programs. (Ongoing activity)
- ii. Continued to actively participate on local, regional, and national committees, including the following, to identify energy issues, develop strategies/solutions, and implement Delaware's Energy and Climate Program.
 - 1. Clean Cities/States Program (Alternative Fuels). (Ongoing activity)
 - 2. National Association of State Energy Officials. (Ongoing activity)
 - 3. Regional Greenhouse Gas Initiative. (Ongoing activity)
 - 4. Transportation & Climate Initiative. (Ongoing activity)
 - 5. Three Region Initiative. (Ongoing activity)
 - 6. Clean Fuel Standard. (Ongoing activity)

3. Build greater understanding of ambient air toxics in the environment

a. Key Accomplishments

- i. Continued to monitor air toxics at the Wilmington [carbonyls, metals, and volatile HAPs] and Delaware City [volatile HAPs] monitoring stations. These air toxics monitoring data are being used to enhance our knowledge of air toxics in Delaware's environment. (Ongoing activity)
- ii. Submitted a grant application for a community-based sampling project to characterize methyl bromide ambient concentrations in communities in the vicinity of the Port of Wilmington in May.

3. Build greater understanding of ambient air toxics in the environment

b. Significant Current Activities

- i. Continued the "Community Air Toxics Study" monitoring project that utilizes a gas chromatographic/mass spectrometer to measure concentrations of multiple hazardous air pollutants (HAPs) at various sites, including schools, in Wilmington. This data will provide insights on the spatial variation of HAP concentrations compared to the existing HAP monitoring results at Wilmington monitoring station. (Est. completion 12/11)
- ii. Continued to refine the Delaware Air Toxics Assessment Study (DATAS) Phase II modeling project. The results provide modeled ambient concentration of air toxics throughout the State. (Exp. completion 4/11)

4. Identify potential harm from exposure to air toxics

a. Key Accomplishments

i. Completed evaluation of EPA's 2005 National Air Toxics Assessment (NATA) and communicated the Delaware-related results on January 31.

b. Significant Current Activities

- i. Continued to coordinate with the Division of Public Health for additional risk assessments needed to finalize Phase II of the Delaware Air Toxics Assessment Study. (Est. completion 4Q/11)
- ii. Presented on January 24 the interim findings from the analyses of the ultra-fine particle data collected at the Martin Luther King monitoring station. (Ongoing activity)

5. Identify options for reducing air toxics in the environment

a. Key Accomplishments

- i. Submitted 2011 Diesel Emissions Reduction Act (DERA) grant application, which has been approved, but not yet funded.
- ii. Submitted a Clean Cities/USDOE grant application through the Transportation & Climate Initiative's "Clean Vehicles & Fuels" workgroup for research and to do planning to establish electric vehicle infrastructure in the 11-State region. The grant was awarded.

5. Identify options for reducing air toxics in the environment

b. Significant Current Activities

- i. Began preparation of comments on the recently proposed Utility MACT (Federal Subpart UUUUU). (Est. completion 8/11)
- ii. Began development of a smart phone "APP Store" for transit-related APPs through the Transportation & Climate Initiative's "Innovation, Communication & Technologies" workgroup. (Est. completion 2012)
- iii. Continued to participate at monthly WILMAPCO meetings for New Castle County and biannual workgroup meetings for Kent and Sussex Counties. (Ongoing activity)
- iv. Continue participation on Mid Atlantic Diesel Collaborative (MADC) projects. (Ongoing activity)
- v. Continued to review and make significant comments on Preliminary Land Use Service (PLUS) applications. (Ongoing activity)
- vi. Continued to maintain open communication with the Claymont Community Coalition on air toxics and other issues. (Ongoing activity)

6. Gather information related to air toxics sources

a. Key Accomplishments

i. Submitted the Underground Storage Tanks (UST) Semiannual Activities Report to EPA in April 2011.

b. Significant Current Activities

- i. Continued to identify new and previously unpermitted dry cleaners, auto-body shops, and gasoline delivery vessel owners. (Ongoing activity)
- ii. Continued to incorporate new notifications and maintain existing active sites in the Delaware Online Asbestos Notification System. (Ongoing activity)

7. Evaluate the effectiveness of the actions taken to reduce harm from exposure to air toxics

a. Key Accomplishments

i. Continued to monitor air toxics at the Wilmington [carbonyls, metals, and volatile HAPs] and Delaware City [volatile HAPs] monitoring stations. These air toxics monitoring data are being used to enhance our knowledge of the changes in the ambient concentrations of air toxics over time. (Ongoing activity)

b. Significant Current Activities

i. Conducted compliance assessments by school bus operators with anti-idling requirements of Regulation 1145, Excessive Idling of Heavy Duty Vehicles, at various schools throughout Delaware between April and June. The collation of findings is underway and the results will be used to revise and/or refocus, if necessary, the anti-idling outreach program. (Est. completion – 9/11)

8. Air toxics resources development

a. Key Accomplishments

i. Provided training recommendations to NACAA/MARAMA for air toxics-related training for inclusion in their development of a National Training Strategy and the new Learning Management System on June 6.

b. Significant Current Activities

i. Identified the internal need for training of permit writers that facilitates their making applicability determinations related to the multitude of area source standards that EPA has adopted over the last several years. (Est. completion -12/11)

c. Pending

i. Funds for travel for training have continued to be limited in 2011. (Ongoing)